

ORIGINAL

BEFORE THE  
**Federal Communications Commission**

WASHINGTON, D.C. 20554

JUN 15 1994

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of )  
 )  
Allocation of Spectrum Below ) ET Docket No. 94-32  
5 GHz Transferred from )  
Federal Government Use )  
 )  
To: The Commission )

REPLY COMMENTS  
OF THE  
AMERICAN PETROLEUM INSTITUTE

The American Petroleum Institute ("API"), by its attorneys, hereby respectfully submits these Reply Comments regarding the Comments of other interested parties filed in response to the Notice of Inquiry ("NOI") adopted by the Federal Communications Commission ("FCC or Commission") in the above-styled proceeding on April 20, 1994.<sup>1/</sup>

**I. PRELIMINARY STATEMENT**

1. As discussed more fully in its Comments filed in this matter on June 15, 1994, API's interest in the 50 MHz of spectrum under consideration in this proceeding is due primarily to three factors. First, API is disturbed over the Commission's lack of response to its prior requests for an Emergency Response Allocation ("ERA") to be used by the

<sup>1/</sup> 59 Fed. Reg. 25589 (May 17, 1994).

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nation's petroleum, natural gas, manufacturing, utility, chemical, forestry and railroad industries. Second, as a member of the Coalition of Private Users of Emerging Multimedia Technologies ("COPE"), API supports development of an "Advanced Private Land Mobile Communications Service" with a spectrum allocation of 75 MHz from bands below 3 GHz. The requested spectrum allocation would be used to meet the Commission's economic and technology development goals by greatly assisting in the development, use, and eventual mass marketing of devices such as advanced wireless imaging and decision processing/remote file access systems. Finally, oil and gas industry licensees continue to seek alternatives for establishing vital fixed communications systems to replace the 1.8 GHz spectrum lost in the reallocation made for the Personal Communications Services ("PCS").<sup>2/</sup> While accommodations were made for replacement spectrum in the Commission's Docket No. 92-9 proceeding, none offer the favorable propagation characteristics available in the 2 GHz range.

2. API is particularly opposed to the Southwestern Bell Corporation ("SBC") proposal for establishing a

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<sup>2/</sup> In the Matter of Amendment of the Commission's Rules to Establish New Personal Communications Services, FCC Gen. Docket No. 90-314.

wireless local exchange system in the band 2390-2400 MHz for exclusive use by Local Exchange Carriers ("LECs").<sup>3/</sup> API also opposes the proposal of the Association for Maximum Service, Television, Inc. ("MST") to reserve the band 4660-4685 MHz for wide band advanced digital video services and to allocate the band to terrestrial fixed and mobile auxiliary broadcast operations.<sup>4/</sup>

## II. REPLY COMMENTS

### A. **The Commission Must Not Ignore the Critical Need for an Emergency Response Allocation**

3. API is deeply concerned that, despite repeated requests made to the Commission, the critical need for a nationwide Emergency Response Allocation ("ERA") has not been addressed.<sup>5/</sup> The need for an ERA for use by the nation's petroleum, natural gas, manufacturing, utility, chemical, forestry and railroad industries is indisputable

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<sup>3/</sup> SBC Comments at 10-11.

<sup>4/</sup> MST Comments at 8.

<sup>5/</sup> API Comments at 4-10. See also, In the Matter of Amendment of the Commission's Rules to Establish New Personal Communications Services, Notice of Inquiry, (Gen. Docket No. 90-314, FCC 90-232), Comments of API at p. 38-52 (filed: October 1, 1990). In the Matter of Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them, Notice of Proposed Rule Making, (P.R. Docket No. 92-235), Comments of API at p. 18 (filed: May 28, 1993).

and vital to meet critical public safety responsibilities. There are no sufficient frequency assignments to accommodate a major chemical incident or fire in the lower 48 states. Should a major chemical or petroleum spill, even a fraction the size of the spill in Prince William Sound, occur in a waterway or along a pipeline or railway, there would be no adequate nationwide communications resources available. Such a large incident could occur due to a maritime accident, hurricane, tornado, flood, explosion, or earthquake. The result could be unnecessarily severe economic and environmental damage, in addition to loss of life, because of an unwarranted slow response from emergency and clean up crews due an absence of adequate mobile radio communications. API urges the Commission to provide for such an emergency without further delay.

4. The 50 MHz of spectrum being reallocated at this time is unfortunately not suitable for an ERA. The bands are incompatible with the emergency response communications equipment currently available. Equipment currently available for operations in the 2.4 GHz and 4.6 GHz bands can only accommodate fixed communications. Thus, an ERA in these bands would be impractical and economically unworkable. The very nature of emergency response communications is the need for mobile communications on land

as well as aboard aircraft and marine vessels. Existing equipment that meets these demands all operate in the bands below 1 GHz. Accordingly, the spectrum under consideration cannot be utilized to address the pressing need for an ERA. API asks the Commission to swiftly address this national safety issue.

**B. Overwhelming Support Exists for Reallocation of the Bands 2390-2400 MHz and perhaps 2402-2417 MHz in Partial Satisfaction of the Needs Raised in the COPE Petition**

5. Of the 75 Comments filed in the NOI<sup>6/</sup>, 36 directly

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<sup>6/</sup> Comments were filed by: American Association of State Highway and Transportation Officials ("AASHTO"); Alcatel Network Systems, Inc. ("Alcatel"); Amateur Radio Council of Arizona ("ARCA"); Amateur Television Network; Radio Amateur Satellite Corporation ("AMSAT"); American Mobile Satellite Corporation ("AMSC"); API; American Radio Relay League, Inc. (the "League"); Apple Computer, Inc. ("Apple"); Association of Public-Safety Communications Officials-International, Inc. ("APCO"); AT&T Corp. ("AT&T"); Ken Bellmard, Esq.; Kent Britain; William A. Burns; Cactus Intertie System and Cactus Radio Club; California Public-Safety Radio Association, Inc. ("CPRA"); Contra Costa County Sheriff's Amateur Radio Unit #339; Cornell University and the National Astronomy and Ionosphere Center ("Cornell" and "NAIC"); Critical Care Telemetry Group ("CCTG"); City and County of Durham, North Carolina ("Durham"); Coalition of Private Users of Emerging Multimedia Technologies ("COPE"); John Eramo & Sons, Inc.; E.V. Williams Co., Inc.; First National Development Institute; Florida Fruit & Vegetable; Forestry-Conservation Communications Association ("FCCA"); GEC Plessey Semiconductors, Inc.; Robert L. Greene; GTE Service Corporation ("GTE"); Industrial Telecommunications Association, Inc. ("ITA"); International Association of Chiefs of Police ("IACP"); Itron, Inc. ("Itron"); InterDigital Communications Corporation ("InterDigital"); County of Kern, California; Kerr-McGee Corporation; King  
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referred to the COPE Petition. All of those 36 comments supported the COPE request for 75 MHz of spectrum from below 3 GHz to establish a Private Land Mobile Advanced Communications Service.<sup>7/</sup> Of the 50 MHz of spectrum made

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<sup>6/</sup>(...continued)

County, Washington; Leaco Rural Telephone Cooperative, Inc. ("Leaco"); Loral/Qualcomm Partnership, L.P. ("LQP"); Major Cities Police Chief Association ("Major Cities"); MST; Mitchell Energy & Development Corp. ("Mitchell"); Motorola, Inc. ("Motorola"); National Association of Business and Educational Radio, Inc. ("NABER"); National Communications System, Secretary of Defense ("NCS"); National Propane Gas Association ("NPGA"); National Academy of Science's National Research Council's Committee on Radio Frequencies ("CORF"); National Utility Contractors Association; New York City Transit Police Department ("Department"); North Carolina Smartnet User's Network ("NCSUN"); Northern Amateur Relay Council of California, Inc. ("NARCC"); County of Orange, California ("Orange"); Pacific Bell and Nevada Bell; Part 15 Coalition; Phelps Sungas, Inc.; Ready Mix Concrete; Rochester VHF Group; San Bernardino Microwave Society ("SBMS"); Southern California Repeater and Remote Base Association ("SCRRBA"); The Southern Company ("Southern"); SBC; Sun Services, Corp.; Superior Asphalt Co.; Symbol Technologies, Inc. ("Symbol"); Telecommunications Industry Association ("TIA"); County of Tulare, California; Utah VHF Society; Utilities Telecommunications Council ("UTC"); Valley Communications Center; Vann Gin Company, Inc.; Visalia Fire Department; Webber Energy Fuels; Westbank Electric, Inc.; Western States VHF-Microwave Society; Western Multiplex Corporation ("WMC").

<sup>7/</sup> API at 10-11; APCO at 2-5; CPRA at 1-3; Durham at 2-4; COPE; John Eramo & Sons, Inc. at 1; E.V. Williams Co., Inc. at 1; Florida Fruit & Vegetable at 1-2; FCCA at 2; ITA at 8-9; IACP at 8-10; County of Kern, California at 1; Kerr-McGee Corporation at 1; King County, Washington at 1; Major Cities at 6; Mitchell at 1-2; Motorola at 4; NABER at 2-3; NPGA at 1; National Utility Contractors Association at 1-2; New York City Transit Police Department at 3-4; NCSUN at 1; Orange at 2; Phelps Sungas, Inc. at 1; Ready Mix Concrete at 1-2; Sun Services, Corp. at 1; Superior Asphalt Co. at 1;  
(continued...)

available, the band 2390-2400 MHz is considered to "best meet [the] needs of private system licensees."<sup>8/</sup> Some limited applications could possibly be met in the band 2402-2417 MHz, although it is congested with Industrial, Scientific, and Medical ("ISM") and Part 15 devices.<sup>9/</sup> An allocation of both of these bands in accordance with the COPE petition would be the first step toward meeting the obvious need for a cumulative allocation of 75 MHz for a Private Land Mobile Advanced Communications Service.

6. SBC's request for the band 2390-2400 MHz, for exclusive use by LECs, to establish a wireless local loop is untenable.<sup>10/</sup> First, Congress and the Administration are laboring mightily to open up the local exchange to

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<sup>7/</sup> (...continued)

County of Tulare, California at 2; UTC at 3,7; Valley Communications Center at 1; Vann Gin Company, Inc. at 1; Visalia Fire Department at 1-3; Webber Energy Fuels at 1; Westbank Electric, Inc. at 1; WMC at 4.

<sup>8/</sup> UTC Comments at 6; See also, Motorola Comments; COPE Comments.

<sup>9/</sup> 47 C.F.R. § 2.106. [API would also like to reiterate its concern that Part 15 spread spectrum operations in the band 2402-2417 MHz should not be curtailed. The use of these devices meet a variety of essential and emergency response needs and should not be disrupted. Significant support exists for this position. See, APCO at 6; AT&T at 1-3; Southern Company at 3-5; WMC at 6; Symbol at 1-6; Interdigital at 1-5; and Itron at 1.]

<sup>10/</sup> SBC Comments at 10-11.

competition. This proposal seeks to extend Regional Bell Operating Company dominance in the local exchange. Second, SBC's proposal involves installing a "radio port [to] serve an area covered by a circle with an approximate radius of 1,000 feet."<sup>11/</sup> This proposal sounds suspiciously like a PCS system. As such, if SBC wants to install such a system, it should participate in the PCS auction proceeding for spectrum already dedicated to that service.

**C. The 4660-4685 MHz Band Should Be Allocated for Primary Fixed Use**

7. The loss of fixed allocations at 1.8 GHz and 2.1 GHz in the PCS proceeding was profound.<sup>12/</sup> The requirements for operational-fixed systems remain. Although the lightly loaded band 4660-4685 MHz does not provide the positive propagation characteristics which exist at 1.8 GHz and 2.1 GHz, a move toward replenishing spectrum allocations for essential fixed services needs to be made. This move toward replenishment could be initiated by allocating the 4660-4685 MHz band for primary fixed use by entities foreclosed from using the bands 1.8 GHz and 2.1 GHz.

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<sup>11/</sup> Id. at 3.

<sup>12/</sup> API has participated in nearly every phase of the General Docket No. 90-314 PCS proceeding and its concerns are well documented.



8. MST's assertion that the band 4660-4685 MHz must be allocated for "auxiliary broadcast operations"<sup>13/</sup> is not credible. MST's foundation for such an assertion is that a study "prepared by the Institute for Telecommunications Sciences at NTIA" indicated that the auxiliary broadcast band 1990-2110 MHz is "crowded" in some major markets.<sup>14/</sup> However, the Commission must be careful not to assume that this study is a pronouncement of NTIA policy.<sup>15/</sup> Additionally, even if the study became NTIA policy, it does not contain an evaluation of the extent to which private allocations are overcrowded versus broadcast auxiliary allocations.

### III. CONCLUSION

9. As many of the Commenters noted, the quality of the spectrum offered by the Federal Government for immediate reallocation is low. Despite this handicap, API believes

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<sup>13/</sup> MSTV Comments at 8.

<sup>14/</sup> See, R. Matheson & K. Steele, A Preliminary Look at Spectrum Requirements for the Fixed Services, at 40-41 (May 1993).

<sup>15/</sup> Id. [The study, which is attached to MST's Comments, clearly notes that: "This document has not been reviewed by NTIA for policy, and it should not be construed to reflect the official or unofficial policies or planning of NTIA."]

the band 2390-2400 MHz and perhaps 2402-2417 MHz could be constructively used to begin meeting the requirements outlined in the COPE petition. The band 4660-4685 Mhz should be slated for fixed use by private systems. Finally, the vital need for an Emergency Response Allocation must be addressed. Unfortunately, the spectrum offered for immediate reallocation does not meet the technical requirements for an ERA. Accordingly, API urges the Commission to address this fundamental need.

**WHEREFORE, THE PREMISES CONSIDERED,** the American Petroleum Institute respectfully requests that the Federal Communications Commission take action in a manner consistent with the views expressed herein.

Respectfully submitted,

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